

L rchl et al.
Serial No. **Unassigned**

6. (Amended) The use of a DNA sequence as claimed in claim 1 for introduction into pro- or eukaryotic cells, this sequence optionally being linked to control elements which ensure transcription and translation in the cells and leading to the expression of a translatable mRNA which causes the synthesis of a plant PRPP amidotransferase.

A2 7. (Amended) The use of a DNA sequence as claimed in claim 1 for generating an assay system for identifying herbicidally active plant PRPP amidotransferase inhibitors.

8. (Amended) A method of finding herbicidally active substances which inhibit the activity of the plant PRPP amidotransferase, which comprises preparing, in a first step, PRPP amidotransferase using a DNA sequence as claimed in claim 1 and measuring, in a second step, the activity of the plant PRPP amidotransferase in the presence of a test substance.

A3 11. (Amended) An assay system based on the expression of a DNA sequence SEQ-ID No. 1 or SEQ-ID No.9 as claimed in claim 1 for identifying herbicidally active plant PRPP amidotransferase inhibitors.

A4 14. (Amended) A plant PRPP amidotransferase inhibitor identified using an assay system as claimed in claim 11.

15. (Amended) An inhibitor as claimed in claim 13 for use as herbicide.